



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

SA3804.150.20



Harvard College Library

FROM

Prof. C. E. Norton
of Cambridge.

10 Feb. 1883.

NOTES ON MITLA,

OAXACA, MEXICO,

WITH PLANS AND MEASUREMENTS OF THE RUINS,

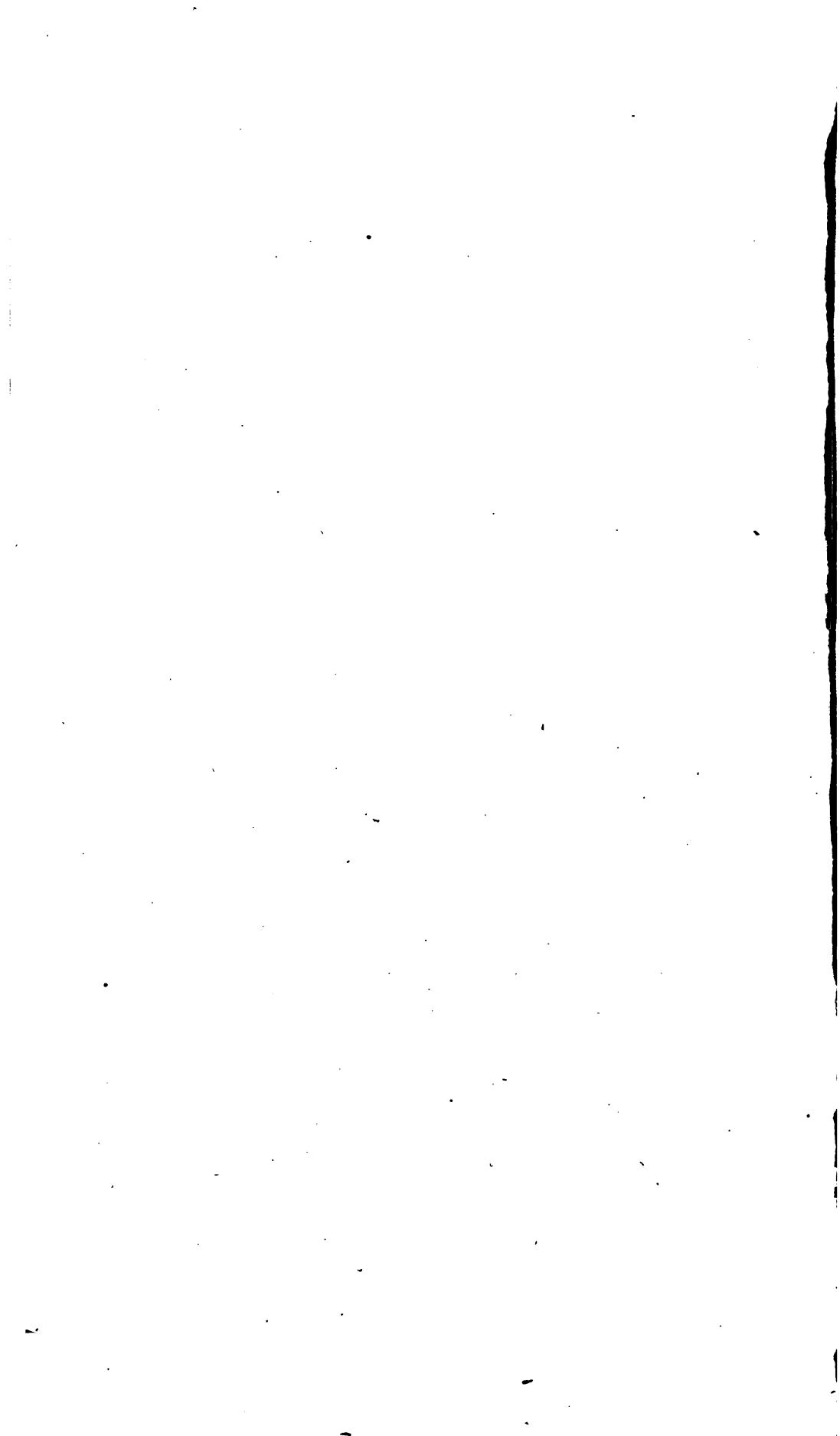


BY LOUIS H. AYMÉ,

U. S. A. CONSUL AT YUCATAN.

FROM PROCEEDINGS OF THE AMERICAN ANTIQUARIAN SOCIETY,
NEW SERIES, VOL. II., PART I., APRIL 26, 1882.

WORCESTER:
PRESS OF CHAS. HAMILTON,
311 MAIN STREET.
1882.



NOTES ON MITLA,

OAXACA, MEXICO,

WITH PLANS AND MEASUREMENTS OF THE RUINS,

BY LOUIS H. AYMÉ,

U. S. A. CONSUL AT YUCATAN.

FROM PROCEEDINGS OF THE AMERICAN ANTIQUARIAN SOCIETY,
NEW SERIES, VOL. II., PART I., APRIL 26, 1882.

WORCESTER:
PRESS OF CHAS. HAMILTON,
311 MAIN STREET.
1882.

SA 3804.150.20

Arg990.3

1883, Feb. 10,
Gift of
Prof. C. E. Frerichs,
of Cambridge.

NOTE BY THE COMMITTEE OF PUBLICATION OF THE
AMERICAN ANTIQUARIAN SOCIETY.

THE paper by Mr. Louis H. Aymé, U. S. A. Consul at Yucatan, which treats of the ruins of Mitla, was received too late to allow of its presentation to the Society at their last meeting, but it is now published because it treats of the archæology of a portion of the Continent where investigations are being made and public curiosity is largely excited, and is nearly allied to communications previously published. It is only by comparing the statements of different explorers that we can obtain satisfactory material for forming a deliberate judgment, and in order to furnish such matter as has come to our hands promptly for the consideration of those interested in archæological research, it has been thought best not to delay the publication of this paper. We are indebted to Mr. Stephen Salisbury, Jr., for making a translation from Burgoa's description of Mitla, which was sent to us in the original Spanish.

NOTES ON MITLA.

An itinerary of a journey taken by the writer in July, 1881, may not be uninteresting as an introduction to a notice of the famous ruins of Mitla.

The point of departure is Esperanza, on the Vera Cruz railway. You leave there at 10.30 A. M. in a horse-car, and ride 50 kilometres to Tehuacan, arriving about 3 P. M. Fare \$1.50. The fare to Esperanza is about \$8 from either Vera Cruz or Mexico. The next morning at 3 o'clock, you take a frightfully uncomfortable stage, and for thirteen wretched hours you are banged and bumped until you are ready to welcome the sight of Tecomavaca, at 4.30 P. M. There is a wretched hotel there where you become acquainted with the plague of Oaxaca—fleas. If you have been wise you have written to Don Constantino Rickets, an Englishman, and asked him to send Santos Gomez (the prince of guides) with the necessary horses to meet you there, or if you prefer you may have a litter swung between two mules, fore and aft, as a sailor would say. Gomez will charge you \$1 per day for each horse

and \$2 a day for himself. You set out at 5 A. M., enter the mountains, if you are enthusiastic turn off and half ride, half walk, a league or two, and visit the curious ruins of the Cerro de las Juntas. I did, and you have some of the results, and I will send you later a paper on this and other ruins in Oaxaca. On the road it is broiling hot, but the scenery is simply magnificent. If it is a clear day you will probably catch a glimpse of the topmost peak of Orizaba, 150 miles away. At 12 M. hot and hungry, you stop at the sugar hacienda of Gtiendulain (27 miles), have an excellent breakfast and sleep as well as the millions of flies will let you until 3.30 P. M. Then 15 miles more and you are at the picturesque little town of Dominguillo at 6 P. M. You are in the heart of the mountains, and can see the road you are to travel to-morrow stretching up, up, up until it is lost among the peaks. You sleep well, or ill, according to your susceptibility to flea-bites. The next day is a repetition of the day before, except that you should bring your breakfast with you. You reach Huitzo at about 5 P. M. (54 miles). Next morning you ride through the glorious valley of Oaxaca, stop aside at Etla and visit the mounds of the Cerro de las Peñas, and at 11 A. M. you ride through the stony streets of Oaxaca to the hotel opposite the cathedral, where you rest, wash off the dust of travel and take a good breakfast. If you wish to go directly to Mitla, you either keep your horses, or, better still, hire a carriage extra. That costs about \$10. Mitla is distant about 30 miles to the southeast. About half way you stop at Santa Maria del Tule to see the wonderfully large tree; it has been looming on the horizon for miles. It is large. I measured it roughly; its circumference following the sinuosities in and out five feet from the ground is 146 feet; outside all, 104 feet; spread (diameter) of foliage, 141 feet; long diameter of trunk, 40 feet; short diameter of trunk, 20 feet; height, about 160 feet. Then on to Mitla. You reach the little village about 4 P. M., drive up to the lovely house of Don Felix Quero, are heartily welcomed by him, by his comely wife and pretty daughters. You take a dinner (the best you will get in Oaxaca) in a rose-covered corridor, walk out about six minutes, cross a little stream, double the corner of a ruined mound, and Mitla is before you. The "tourist" could "do it" in one hour, but we should find days not enough. Mitla is not so grand, so magnificent as Uxmal, but it has a beauty of its own, as it nestles quietly at the foot of the mighty mountains, the ruins of the grim "Fortin" standing sharp against the evening sky, and as the sun sinks, casting soft, lingering rays athwart the cream and red mosaics, one might fancy he heard the weird chant of the priests, the lament of the mourners for the dead who rest in "Lyobaa," "The Centre of Rest." It is full of interest, and the careful, earnest worker could in one short month collect a vast amount of information about Mitla. The library of the Institute at Oaxaca is rich, very rich, in old books and papers, and there is a treasure there for some archaeologist. When I shall have finished my work here in Yucatan I should like to go there once more. The memories of the beautiful idols of stone, pot-

tery and metal, the wonderful hollow castings of pure gold, the undiscovered mines of archæological treasures to be gathered are very tempting.

Mr. Ad. F. Bandelier in his "Notes on the Bibliography of Yucatan and Central America" (Proceedings of the American Antiquarian Society, October 21, 1880, p. 116), speaks of the work of Francisco de Burgoa, which treats of Mitla, entitled *Geográfica Descripción de la Parte Septentrional del Polo Artico de la América, México*, 1674, and says of it: "This work is regarded (especially by such as have not seen it) as the leading work on Oaxaca. I have never seen it—it is exceedingly rare." It may be well to introduce the plans and measurements sent herewith by this earliest description of Mitla. The portion given in translation is from Vol. II., Part 2, Chap. 53.

BURGOA'S DESCRIPTION.

"Two leagues beyond this (Tlacolula), stretching out towards the east upon level ground is the celebrated town of all Zapoteca, called Mictla in the Mexican, and it resembles the *inferno* from the depths which are there. The natives there call it Lyobna, the centre of rest, which blind politeness so ridiculed as to call hell a rest * * * * and even this doctrine and the administration of this town does not affect this province, because it is a lay benefice, being the sepulchre of the kings of Zapoteca."

"I have promised to say something of its greatness, and to be the first to speak also in respect to Tetycpaq, of what I have learned from the papers which have come to my hand, and from the traditions of aged Indians who heard them from their great religious leaders, and as to those things in which there is much similarity still existing there.

"This town of Mitla is situated seven or eight leagues from the city of Antiquera, stretching towards the east on level ground, and its situation is at the foot of the mountainous range of Tentitlan that runs very near it, and the town stands upon an eminence somewhat higher than the valley through which passes a small river that traverses it. Upon the north side the land is very dry and stony, and as respects its antiquity, nature or the universal deluge have left there a great hollow, of which the Devil took possession, and the Indians arriving to populate this place, he ruled them from the large rock of Xaquija or Tentitlan, and in the Miztecan country he used the cave of Chalcacatongo to bury their chiefs, and this place for the chiefs of the Zapotecas, where Satan planted the greatest multitude of errors and abominations against the head of the Roman world, and against the sacred Apostolic seat of the Vicar of Christ and successor of St. Peter, introducing a superior head as regards the worship of his gods, which we call ecclesiastical jurisdiction, with spiritual and temporal power over the chiefs and the people.

"Although many of the kings of Jerusalem were anointed as priests, as happened to the prophet Samuel, with Saul and David who came before him, in Mexico the emperors could chastize them. Here the

highest priests were absolute and independent, so that the kings of Teozapotlan entertained veneration and respect towards them, considering them to be so near to the gods, as instruments fit to order for all favors and chastisements, both the one and the other. They held the belief that the priest could alone be the mediator in all their troubles and difficulties, which were so constantly occurring. The whip of this superior priest was like that of a dissembling foreign tyrant, whose orders and mandates were executed at the cost of their blood. For the support of this one they erected the palace of the living and the dead, because wise as the Devil was, he desired to act against the authority of the Pope, and gave indulgences to the living and conceded favors and concessions and remission of sins to the dead. They built in this square this beautiful house or Pantheon, with stories and subterraneans, the latter in the concavity which was found under the earth, equalling in style the halls which enclose it, having a spacious court; and to build the four equal halls they worked with what force and industry they could secure from a barbarous people.

"It is not known from what quarry they could cut such great pillars of stone, that with difficulty two men could embrace them with their arms extended. These, although without capital or pedestal, straight and smooth, are more than five yards long composed each of a single stone, and served to sustain the roof. The roof was of flat stones two yards or more long, and one broad, and half a yard thick, laid upon the pillars successively. The flat stones are so much alike and so well adjusted one to the other, that without mortar or cement they appear in their construction like tables brought together. The four halls are very spacious, covered in the same way with this kind of roof. The walls excelled in execution the work of the most skilled artificers of the world, so that neither the Egyptians nor the Greeks have written of this kind of architecture, because they began at the lowest foundations and followed upwards, spreading out into the form of a crown, which projects from the roof in breadth and appears likely to fall.

"The centre of the walls is of a cement so strong that we do not know with what liquid it was made. The surface is of such a singular construction that it shows something like a yard of stones. The sculptured blocks serve to hold innumerable little white stones that fill it, beginning with the sixth part of an ell and the half of an ell wide and the quarter part of an ell thick, so smooth and similar that it seems as if they were made in a mould. Of these there was so great a variety, and they were so connected one with the other, that various showy pictures an ell wide each, the length of the hall, were constructed with a variety of decoration on each as high as the capital. And it was so neat that it exceeded the description, and what has caused astonishment to great architects was the adjustment of these little stones without mortar or any instruments. They worked them with hard flints and sand and produced a building of so much strength that, being very old and beyond the memory of the living, it has lasted to our times. I saw it much at

my ease thirty years ago. The rooms above were of the same style and size with those below, and although portions were somewhat ruined because some of the stones had been carried away, they were very worthy of consideration. The door frames were very capacious, composed of a single stone of the thickness of the wall at each side. The lintel or architrave was a single stone which held the two below.

" There were four halls above and four below. They were divided in this way: That in front served as a chapel and sanctuary for the idols, which were placed on a large stone that served as an altar at the great feasts or at the funeral of some king and principal chief. The Superior gave notice to the lesser priests or inferior officers that they should arrange the vestments and decorate the chapel, and prepare the incense. They went down with a great escort without any of the people seeing them, nor was it ever permitted them to turn their faces toward the procession, being persuaded that they would fall dead in the act of disobedience. Upon entering the chapel the priest put on a large white cotton robe, and another one embroidered with figures of beasts and birds in the manner of a surplice or chasuble. Upon his head he had something after the style of a mitre, and upon the feet another invention woven with threads of different colors, and thus clothed he came with great pomp and circumstance to the altar. Making great obeisance to the idols he renewed the incense, and began to talk very much between his teeth with these figures, the depositaries of infernal spirits. In this kind of communication he continued with these deformed and horrid objects, that held all overcome with terror and amazement until he recovered from his diabolical trance, and told the spectators all the fictions and orders which the spirit had persuaded him of, or which he had invented.

" When he was obliged to make human sacrifices, the ceremonies were doubled and the assistants bent the victim across a great stone, and opening the breast with some knives of flint they tore it apart with horrible contortions of the body, and laying bare the heart they tore it out with the soul for the Demon. They carried the heart to the Chief Priest that he might offer it to the idols, putting it to their mouths with other ceremonies. The body they threw into the sepulchre of the blessed, as they called it. If after the sacrifice any one wished to detain those who officiated, or to demand some favor, he was informed by the inferior priests that he could not go to his house until his gods were appeased, commanding him to practice penance, fasting without speaking to any woman but only to the priest. To one doing penance for vices honesty was required, and until he declared that he practised it he was not allowed to depart from the enclosure.

" One hall was the burial place of these priests, and another hall was for the kings of Theozapotlan, who brought decorations of the best garments, feathers, jewels, and chains of gold with precious stones, arming them with a shield in the left hand and in the right a sword, like those they used in their wars. During the funeral rites they played upon very

sad and dolorous instruments, and with grievous lamentations and great sobbing they went on chanting the life and exploits of their chief, until they placed him upon the funeral pile intended for him. The last hall had another door at the rear into an obscure and fearful opening that was closed with a great stone to shut the entire entrance, and into it they threw the bodies of those that they had sacrificed, and also those of great chiefs or captains that had been killed in battle, from whence they brought them, although from a great distance, for the purpose of burying them there. Here was practised the blind barbarity of the Indians. The wicked priests taught those who were suffering from infirmities or from their labors that here they might hope for a happy life, and they let them in alive among those sacrificed, allowing them to enter by that door and walk about in that terrible space, seeking repose among their ancestors; and allowing this by favor they withdrew the attendants and departing by that opening, they again replaced the stone. The miserable creature then wandering about in that dark abyss perished of hunger and thirst; the sufferings to which he was condemned beginning at the time when he was left. To this terrible place they gave the name Liyobaa, from that of the town.

“ Since imparting to them the light of the Gospel our professors have taken much care in teaching them and in seeking to learn if the common errors of these people were perpetuated by their fabulous traditions.

* * * * *

“ The high rooms remained open which surrounded the square and other halls which were below, and the remains exist to the present time. One high hall was the palace of the Chief Priest, in which he gave audience and slept, which occupied the whole square. The throne was of the height of a cushion, with arms covered with tiger skins and stuffed with small soft feathers or very pliable grass adapted to that use. The other seats were smaller. When the King came to visit him, such was the authority of this minister of the Devil that no one dared to pass through the square, and to avoid it they had the other three halls with gates at the rear through which the officers entered both above and below. They had outside passages and alleys for entering and going out from an audience. These priests never married and held no commerce with women except on certain solemn occasions, which they celebrated with much drinking and over-indulgence. Unmarried women were brought to them, and if any of them became enceinte, she was kept retired until the birth of the child. If a boy was born he was brought up as the successor of the priest, which office belonged to the son or next of kin, and never was elective.

“ The second hall was that of the priests and their assistants. The third that of the King when he came, and the fourth that of the other leaders and captains. The space being limited for so many different and various households, they conformed themselves to circumstances without preferences or partiality; no one having any jurisdiction there except the Chief Priest, whose authority was supreme over all.

"All the halls were well covered with mats and very clean. No one not even of the highest officers, was permitted to sleep in the upper rooms. All used very curious mats upon the ground, with the soft skins of animals and delicate fabrics to cover themselves. Their food was ordinarily animals from the mountains—deer, rabbits and other sorts,—together with birds, which they obtained in the lakes or artificial ponds. Their bread was from white corn meal well crushed. Their drinks were always cold, of crushed cocoa, and of gruel diluted with water; others were from fermented fruits and from orange juice stirred up with the wine of the maguey. As the people had no permission to drink, nor to become drunken, there was a great abundance of drink. And as there were so many beverages and so few to use them they never were able to exhaust the supply, the priests therefore drank very costly drinks to excess with free license, more than the chiefs in their best estate. This was the most contagious and injurious practice of the Indians, as it consumed their properties, wasted their health and shortened their lives. All this notice of Mitla is introduced into this history in order not to fail in performing the promise previously made, even though it concerns a profane and superstitious error, the most vital which I have discovered about this nation."

MEASURES OF BUILDINGS AT MITLA.

SOUTH GROUP. BUILDING No. 1.

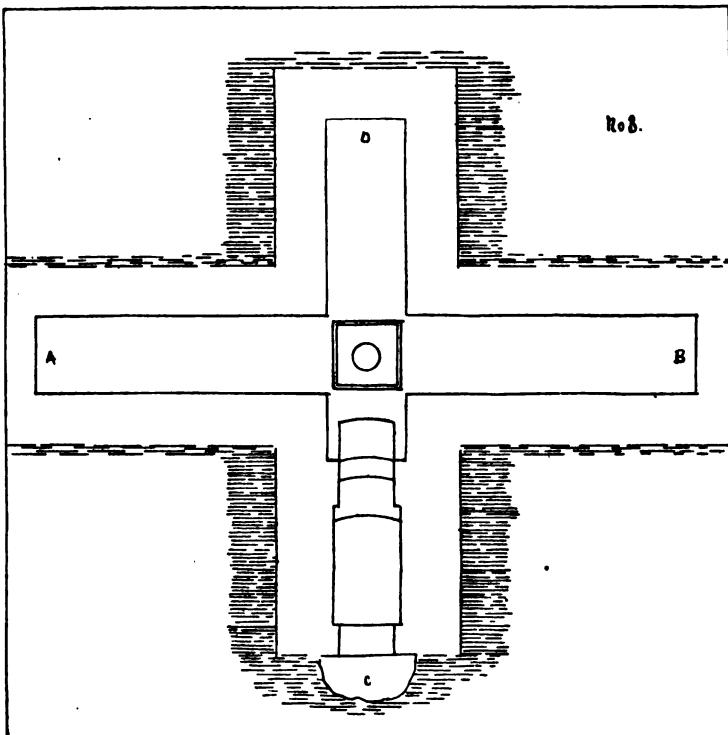
Present outside length, 88 ft. 6 in.; width, 19 ft. 8 in. approximately. Original inside length, 88 ft. 4 in.; width, 8 ft. 11 in. Thickness of front and back walls, 5 ft. 4 in.; side, 2 ft. 7 in. approximately. Width of doorways, 7 ft. 2 in. Wall between doorways, 7 ft. From west end, outside, to west end of west doorway, 26 ft. 9 in. From east end, outside, to east end of east doorway, 26 ft. 3 in. Present height, inside, 9 ft. 10 in. approximately, from top of west door lintel; outside, 12 ft. very rough wall, much ruined at top. Height of doorways, 6 ft. 6 in. Monoliths, consisting of two door-jambs, at extreme east and west ends of extreme doorways. Height, 6 ft. 6 in.; breadth, 5 ft. 4 in.; thickness, 1 ft. 5 $\frac{1}{2}$ in., and three Lintels:

LENGTH.	BREADTH.	THICKNESS.	
		On top.	At bottom.
East, 14 ft. 8 in.	4 ft. 10 in.	3 ft. 5 in.	5 ft. 5 in.
Centre, 14 " 10 "	4 " 10 "	3 " 7 "	5 " 5 "
West, 12 " 6 "	4 " 10 "	3 " 2 "	5 " 5 "

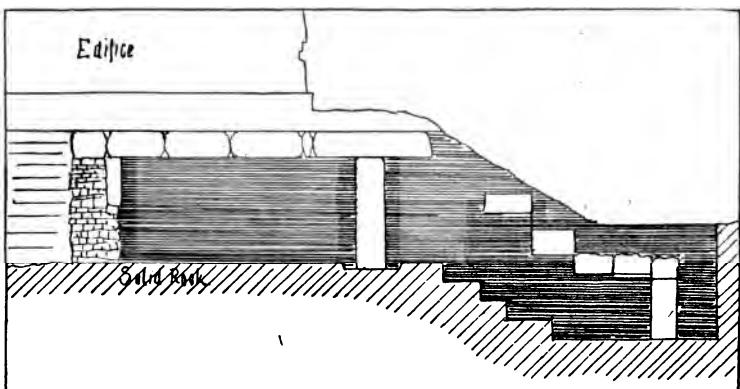
Directly opposite centre doorway in north wall about 3 feet from floor is a square recess, of large stones, measuring about 2 ft. long, 1 ft. 3 in. high and 1 ft. 6 in. deep.

SUBTERRANEAN APARTMENTS.

Pillar. Height, 6 ft. 4 in. (the height of all of the rooms); circumference, 5 ft. 6 $\frac{1}{2}$ in. Room B. Length, 12 ft. 8 in.; width, 5 ft. 2 $\frac{1}{2}$ in. Room C. Length, 18 ft. 2 in.; width, 5 ft. 1 $\frac{1}{2}$ in. Room D. Length, 18 ft. 2 in.; width, 5 ft. 1 $\frac{1}{2}$ in. Height of all, 6 ft. 4 in.



PLAN OF SUBTERRANEAN APARTMENTS.

PERPENDICULAR SECTION, THROUGH C. D., *vide* No. 8.

BUILDING No. 2.

Outside length, 180 ft., approximate; width, 38 ft. Inside length, 121 ft. 8 in.; width, 28 ft. Average height, 17 ft. 6 in. Thickness of front wall, 5 ft. Height of doorways, 6 ft. 10 in.

Monoliths. Door-jambs each, height, 6 ft. 10 in.; breadth, 6 ft.; thickness, 1 ft. 6 in.

Lintels.—

South.	Length, 19 ft. 7 in.	Breadth, 3 ft. 8 in.	Thickness, 4 ft. 9 in.
Centre.	" 18 " 9 "	" 3 " 4 "	" 4 " 9 "
North.	" 20 "	" 3 " 8 "	" 4 " 9 "

Niche opposite centre door. Height from ground, 3 ft. Height, 1 ft. 6 in.; width, 2 ft. 9 in.; depth, 1 ft. 9 in.

BUILDING No. 3

Is identical in measurements with No. 2, except as regards the monoliths. *Jambs.*—Height, 6 ft. 8 in.; breadth, 5 ft. 8 in.; thickness, 1 ft. 7 in.

<i>Lintels.</i> —West.	Height, 15 ft.	Breadth, 5 ft.	Thickness, 8 ft.
Centre.	" 18 " 4 in.	" 5 "	" 8 "
East.	" 16 " 6 "	" varies.	" 8 "

Great Patio. About 150 ft. square.

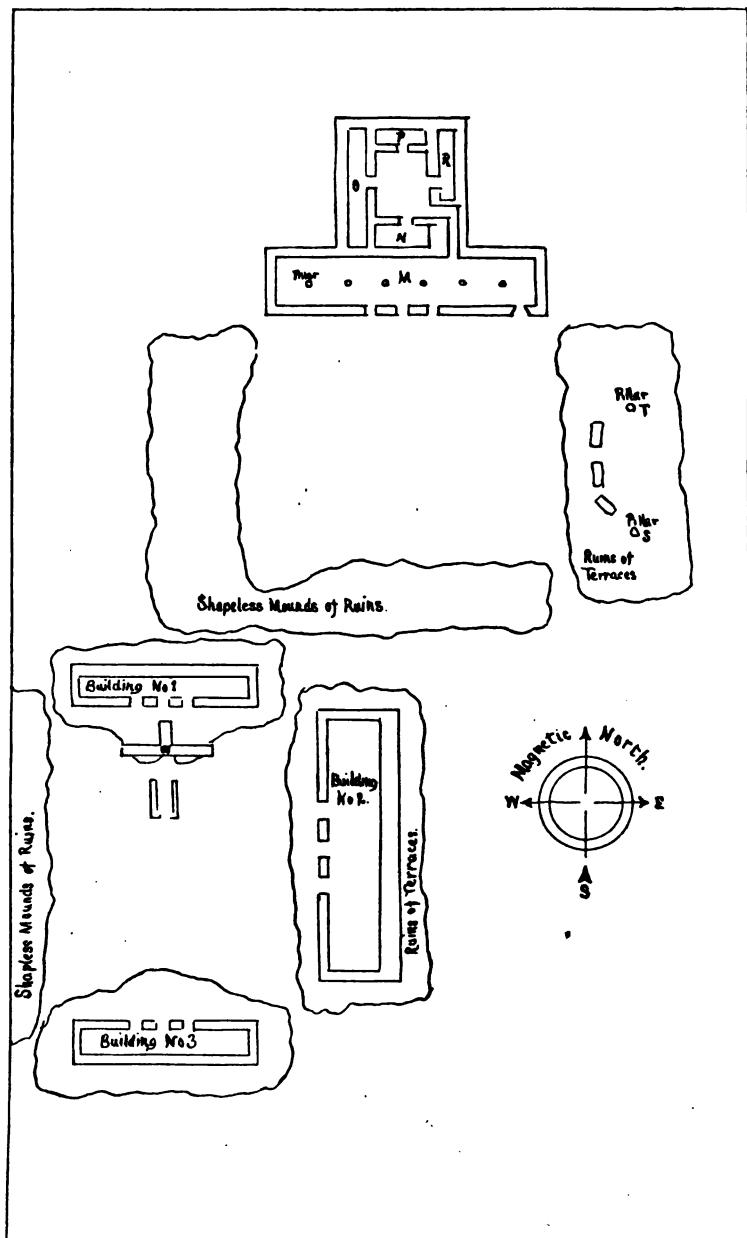
Sepulchral Chamber, or so-called *Subterranean Passage*. Length (inside door-jambs), 7 ft. 3 in.; width, 3 ft. 7 in. From north entrance to room with pillar, 18 ft. Height of steps, about 1 ft. Height (the larger portion), 8 ft. 11 $\frac{1}{2}$ in. (Just inside north door), 4 ft. 11 in.

<i>Doors.</i> —North.	Height, 8 ft. 9 in.	Width, 3 ft. 2 in.
South.	" 3 " 8 "	" 2 " 8 $\frac{1}{2}$ "

Jambs., to north door. Thickness, 5 in. To south door. Thickness, 1 ft. 10 $\frac{1}{2}$ in. Thickness of door-jamb being measured in long diameter of room. Total length of room is 9 ft. 6 in. Height of ornament from floor, 1 ft. 1 in. Breadth of ornamented band, 1 ft. 10 in. Large stone which probably closed south end; length, 8 ft. 4 in.; width, 2 ft. 7 in.; thickness, 2 ft., *approximately*.

NORTH GROUP. NORTH BUILDING.

Apartment M.—Inside, length, 125 ft. 2 in.; width, 23 ft.; height (average), 12 ft. Thickness of front wall, 4 ft. 6 in.; side wall, 3 ft. 2 in. Doorways; width, 7 ft. 9 $\frac{1}{2}$ in. Wall between doors, 7 ft. Doorway, west corner of building to west edge of west doorway, 47 ft. Doorway, east corner of building to east edge of east doorway, 49 ft. 9 $\frac{1}{2}$ in. Window; is distant from inner east angle 2 ft.; inside width, 6 ft. 4 in. Columns; height, 11 ft. 1 in.; circumference, 9 ft. 6 $\frac{1}{2}$ in. From west wall to column 1, 15 ft. 4 in.; column 1 to column 2, 15 ft. 4 in. From column 2 to column 3, 15 ft.; column 3 to column 4, 15 ft. 11 in. From column 4 to column 5, 15 ft. 4 in.; column 5 to column 6, 15 ft. From column 6 to east wall, 15 ft. 4 in. From north wall to columns, 10 ft. 8 in. From south wall to columns, 9 ft. 10 in. Passage-way. From east wall of Apartment M, 36 ft.; from west wall, 85 ft. 4 in. Height, 5 ft. 7 $\frac{1}{2}$ in.; width, 3 ft. 8 in. (Portion running north.)



PLAN OF BUILDINGS AT MITLA, OAXACA, MEXICO.

Length (short side), 18 ft.; (long side), 23 ft. 8 in. Length (portion running west), 10 ft. 10 in. Patio; north to south, 30 ft. 10 in.; east to west, 29 ft. 4 in.

Apartment N.	Length, 29 ft. 4 in.	Breadth, 8 ft. 6 in.	Height, 12 ft.
“ O.	57 “ 6 “	8 “ 2 “	12 “
“ P.	29 “ 5 “	8 “ 3 “	12 “
“ R.	36 “ 3 “	6 “ 8 “	12 “

Average wall thickness, 4 ft.

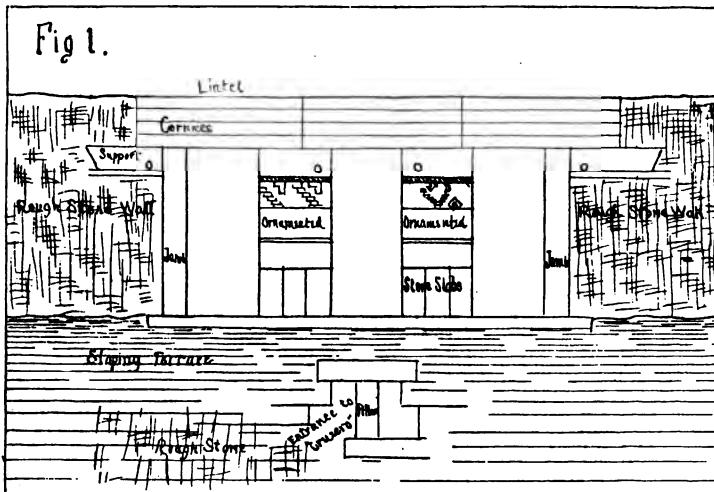
East building. Distance between pillars, 54 ft.

All of these measurements were made *repeatedly*, in order to avoid errors, and may be considered as quite correct. A tape line 60 feet long was used. Many measurements are omitted to avoid unnecessary repetition, but the plans accompanying these tables will supply the omissions if necessary.

NOTES.

SOUTH GROUP.

This group consists of three large buildings occupying the north, east and south sides of a large courtyard. They were originally elevated on large artificial mounds, now too much ruined to permit of accurate measurement. Below the north building were three subterranean apartments, C, D and B, and in front of these opened what has always heretofore been called the subterranean passage. The walls of the buildings are externally much ruined, but in the interior are highly ornamented. A rough sketch of the façade of Building No. 1 is here presented.



The huge monolithic lintels are cut into a series of cornices, a cross sec-

tion looking something like Fig. 2, representing the pattern thereby formed, which is frequently repeated.

Each building in this group consisted of a single long room, perfectly plain inside, roof-



less now, but originally covered. The manner of constructing the roof was undoubtedly this:—large round beams were

placed about two feet apart, and then a solid roofing of cement¹ was laid. I used the word "undoubtedly" in this connection advisedly, as the holes for the insertion of the ends of the beams still remain in many places in the cement *on the top* of the walls, where the wood has long since decayed and fallen out. The buildings were constructed by raising walls of rough stone, and then facing them on the inner side with squared stones, which in turn were covered with cement. This coat extended over the floors. In Building No. 1 this floor still exists. The only ornament or variation on the inner side was a curious rectangular recess about three feet from the floor. This niche is found in all the buildings in the south group, and also in the Hall of Pillars in the north group. The inner cement on the walls was probably painted in figures, as I found in other ruined buildings at Mitla very beautiful mural frescoes. I shall refer to these further on. The doorways are surmounted by huge lintels, and at the extreme ends are large monolithic door-jams. The exterior of these buildings on their façades was highly ornamented in panels of mosaic work. The separate stones were about 4 inches long, with faces 2 x 5.

The depth of the pattern is about two inches; the  relieve portion was left of the original cream color of the stone, standing out beautifully from the blood red with which the deeper parts were painted. Traces of this red paint are found everywhere.

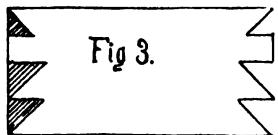
Building No. 2 consists of one large room utterly devoid inside of ornament, except the usual niche. Outside it is very richly ornamented, the patterns being similar to those found on Building No. 1. They are, however, in great part sculptured in the solid stone, as well as being formed in the mosaic pattern just referred to.

Building No. 3 is almost the counterpart of No. 1, except that it has no *visible* subterranean chambers. These, however, may possibly exist. A curious feature is to be noticed in this building. The east lintel was cut as usual into cornices, as in Fig. 2, but for some reason, either a blunder in the carving or something of the kind, it was then turned around, the other side cut and the original cutting filled out with plaster to imitate the flat surface of the lintel, thus:

¹ This is exactly the method of roof-building in vogue in Mexico at the present day.

represents the plaster filling. Directly below Building No. 1 are found the subterranean apart-

Fig 3.



ments. These are three in number; they run west, north and east, respectively, at right angles, all opening on a central space which measures from north to south 5 ft. 1 1/4 in., and from west to east 5 ft. 2 1/4 in. In the centre of this space rises a supporting pillar. In all of the rooms, at a height of 3 ft. 2 in. from the floor, runs a band of ornament 1 ft. 9 in. broad, whose general characteristics are found in the following figures: Fig. 4 is from east end of Room C. Fig. 5 is from east wall of Room B. This last room is

Fig 4.

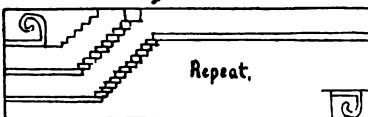
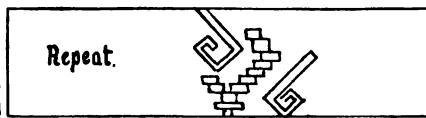


Fig 5.



in the worst condition of the three. The roof is formed of very large flat stones laid crosswise. The floor is very nearly perfect, of bright, smooth red cement, and the walls appear to have been once covered with this cement. These curious apartments are not uncommon in Oaxaca; they are known as "cruzeros." I was told of many in the neighborhood, and while I was measuring and taking notes my companions visited some of them. They tell me that they are in every respect similar to the one just described; and I understand that human bones have been found in these apartments. At the little village of Tentitlan del Valle I heard that there were hundreds of such subterranean apartments, and while I was yet in Oaxaca, the then Governor Don Francisco Mejuciro sent to have some of them opened. Large numbers of very beautiful idols, statuettes, arrowheads, etc., were found, and in one large cruzero were found *five wagon-loads* of crania. Unfortunately I had to leave before they reached the city. On a still lower level, and stretching to the south, is another and much smaller room. At the time of my visit only the mouth was visible. Here for centuries has centered much of the interest of Mitla. This was the mouth of the wonderful subterranean passage said to extend for leagues. I will translate here so much as refers to this subject from Burgoa's account, dated 1674. "And from their fabulous traditions, it was known that they were all persuaded that this frightful concavity ran more than thirty leagues under ground, the roof being held up by columns, and there were men and certain curious Prelates, of good zeal, who being anxious to undeceive these ignorants, went down some steps with a great crowd carrying hatchets and many lighted torches and forthwith met with many columned rows like streets. They brought with them beforehand many strings to use as guides, that they might not

lose themselves in that confused labyrinth, but such was the corruption and bad smell, the dampness of the floor, and a cold wind which extinguished the lights, that at the little distance they had already penetrated, fearing they might become pest stricken or might meet with some poisonous reptile, of which they saw some, they resolved to come out, and ordered this infernal gate to be thoroughly closed with masonry."

¹ Bustamante wrote in 1826: "During the government of Count Revilla Gigedo, Captain Dupax and Don José Castañeda, the artist (who still lives in Mexico), went in search of antiquities, protected by this chief. Castañeda has shown me the collection of drawings which he made in Palenque, Mictlan and other places, and assured me that in those places and in Zachila there exist a multitude of precious things, and anxiously desired that the excavation of the great Sylo or subterranean passage, which exists, closed up, among the palaces of Mictlan, might be protected (or favored) for in it he knew there were mummies as perfectly preserved as in the ancient Pyramids of Egypt."

² In 1824 Mr. Nicholas Mill wrote: "The palace of Mitla was appropriated as a retirement for the sovereign, to lament for the loss of a wife, a mother, or a son. It forms three edifices, the principal of which is best preserved, and is 180 feet in length. A staircase formed in a pit leads to a subterranean apartment 88 feet by 28. This gloomy place is covered with Grecques, the same as the exterior walls of the palace. The most material distinction between this and other Mexican edifices is its having pillars of porphyry to support the ceiling; they are 17 feet high, and the shaft is a single piece. The similarity of the apartments to those found in Upper Egypt is very striking."

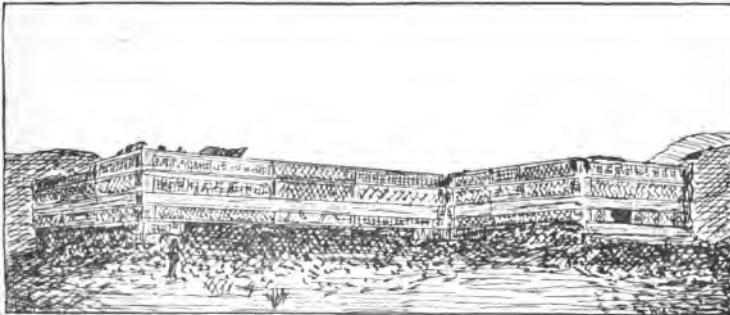
Burgoa's description of Mitla is in the highest degree valuable and interesting, and generally correct. Bustamante's note I give for what it is worth, but Mr. Mill I have quoted at some length, in fact have transcribed *all* he has to say about Mitla to correct some widespread errors. The guardian of Mitla, Don Felix Quero, assured me that the passage ran from one side of the patio to the other, about 150 feet. Resolved to set the vexed question at rest, I had four excavations made, one 75 ft. from façade of Building No. 1 (*vide* plan); at a depth of 3 ft. massive rock was struck. I had it carried down 3 feet further, and the rock continuing I abandoned it. A second excavation, 60 ft. from Building No. 1, gave precisely the same result; a third, 50 ft. from Building No. 1, struck rock at 3 ft. 8 in., carried down through rock to depth of 7 ft. 6 in. and

¹ Historia de las Conquistas de Hernando Cortes escrita en Español por Francisco Lopez de Gomara, y traducida al Mexicano y aprobada por verdadera por D. Juan Bautista de San Anton Muñon Chimalpain Quanhtehuanitzin, Indio Mexicano. Publicada con varias notas y adiciones, Carlos Maria de Bustamante. Mexico, 2 Vols., 12mo. 1826. (*Vide* page 86, Chap. 36, Vol. II: Editor's note.)

² The History of Mexico from the Spanish Conquest to the Present Era, by Nicholas Mill, Esq. London, 1824.

abandoned; a fourth; 43 ft. from Building No. 1 and 18 ft. from pillar of subterranean apartment, went down 5 ft. in sand. I then set all my men to work cleaning out the passage, and finally succeeded in opening it completely. It is only a room, and a very small one at that. Its rough dimensions (for accurate figures *vide ante* measures at Mitla) are: Length, 9 ft. 6 in.; height, 4 ft.; width, 3 ft. 7 in. Roof of very large stones. South end once closed by a large stone still lying in the large patio (*vide* plan). Floor hard polished cement. Walls ornamented in the usual mosaic pattern in a band 1 ft. 10 in. wide, 1 ft. and 1 in. from the floor. Stones forming pattern much decomposed by dampness. I broke through the floor to find solid rock underneath. In fact a great hole was dug in the rock and this chamber constructed therein. The approach is by a flight of three very rough steps hewn out of the living rock, each 1 ft. high. The passageway is a chamber which from its size and position seems to have been simply a sepulchral chamber. If I may be permitted an hypothesis, I should say this chamber served as a grave or vault for the remains of great dignitaries, either chiefs in war, rulers or priests, and that when a ruler died, his bones were collected and deposited in the rooms of the "cruzero." I am now confident that the "30 leagues" of Burgoa and the "88 feet by 26" of Mr. Mill are both wrong.

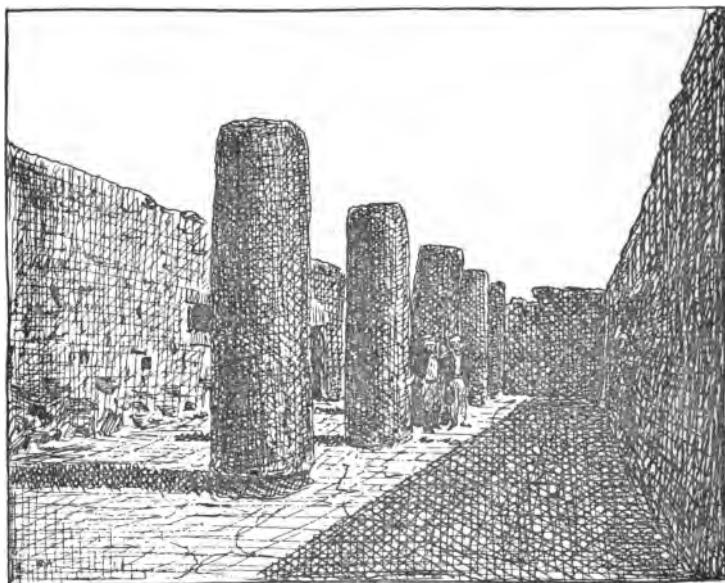
Leaving the South Group we go to the northeast and reach the finest building left in Mitla. It occupies the north side of a "patio" or courtyard rather larger than that of the South Group. On the east side all that remains of the building once there is a portion of the centre doorway, still holding up two of the huge monolithic lintels; the third lies prone, but entire, at their foot, and within lie two large columns 54 ft. apart. The west and south sides are mere shapeless mounds. The North



NORTH BUILDING, FROM N. W.

Building is a very large construction containing five rooms, a central court, and a passageway. The first room one enters is that marked M on the plan. It is a noble apartment 125 ft. long and 23 ft. wide, and its most striking feature is the row of six large columns it contains. This room has as usual three doors with the usual three monolithic lintels

and two jambs. It is perfectly plain, save the niche. The floor is well covered with cement. The columns are arranged from east to west, they do not run in a line but are eccentrically placed as regards the room; they also vary in their distances from each other and from the end wall. They are six in number (one of them does not appear in the picture owing to the location of the camera), monoliths, and are *not* of porphyry. The eccentricity of these columns is notable as a type of the ruling style of construction of Mitla. The great court-yards are not perfectly square; lines drawn from the centres of doorways do not intersect in the centre, but at the side; the ornament on one side of a door is never duplicated on the other side, no two door lintels are of the same size. In a word, careful attention has been paid to make the whole *asymmetrical*. The effect in the matter of ornament is bizarre and striking, in the architectural position of the buildings, rooms, and parts of rooms; it is only revealed on measurement. In Chichen-Itza, Uxmal and Kabah, on the contrary, we find the most perfect symmetry. This asymmetry of Mitla is not accidental I am certain, but made designedly; what that purpose was I do not know. M. Désiré Charnay tells me that he has observed the same thing at Palenque. To return to our columns. They are 11 ft. 1 in. high, nearly perfectly cylindrical, slightly tapering toward the top which is flat. They did *not* probably support a roof at any time, for the



HALL OF PILLARS. FIG. 6.

walls are still nearly one foot higher than the columns, and on the top of these very walls I found the holes where the roofbeams rested. The

position of the two pillars 54 feet apart, with a smooth cement floor stretching between them in the ruins of the East Building, shows conclusively that they had a special significance. Further, there are two in front of another ruined building in Mitla, and a third in the village, standing in the open air. Authors, including Burgoa, say that they are of porphyry, and served to support the roof. Both of these statements are erroneous. A new feature in this room is a veritable *window* (*vide* plan). A curious point I noticed is a notable diminution in the width of the doorways of Rooms M, P and R in the later constructions, and also the window just mentioned. These later additions are sometimes, as in Room R, of adobe, in the other cases of brick and cement. At first I thought that it was done as supports, as many, in fact all but two of the huge lintels are broken, apparently by their own weight, but close examination showed this hypothesis to be untenable.

In Room R a very curious feature is to be noticed. As the whole of the inner walls was decorated, in this building, with the usual mosaic pattern, whenever the solid stone rendered it necessary the pattern was *sculptured* across the stone; so we find it on the south end of the lintels. A glance at the plan will show that the north end is in a dark corner. Now the sculpture should have run clear across the stone; it does not, but for a great space the stone is left blank. Whether the sculptor became tired or forgot, or whether the stone was too hard, whatever the reason, there we have an evidently unfinished piece of work. That they were not afraid of work is shown by the care used and great labor expended on the east lintel of Building No. 2, South Group (*vide* Fig. 8). There are examples of apparent great care and as great carelessness. In the plan the window is shown of $6' 4"$ This is wrong; it should have been thus: $6' 4"$ this form:  The passageway is 

of large stones covered with hard, bright, dark red cement; it opens on a central court surrounded by four rooms. The court-yard and rooms are all floored with hard cement. The patio is very well preserved. Room N is poorest of the four, and Room O is in a very perfect state. Room P comes next, and Room R. is in good condition.

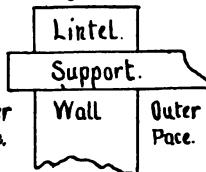
The patio and rooms, and indeed the whole building, except the Hall of Pillars (Room M), is covered with ornaments. These ornaments are variations from a few simple types. The walls are faced with large stones and the ornaments are arranged in panels. The photographs sent with this paper show the ornaments well. Still further to the north are the remains of a very large edifice, but it is now part and parcel of a church and of the buildings thereto annexed, and it is hard to separate the old from the new. Still here I found on a cornice remains of mural paintings. The subject seems (from memory) to be identical with that sculptured on the so-called "Sacrificial Stone" in the patio of the Museo Nacional at Mexico, and on the walls and roof of the chamber of the

Gymnasium at Chichen-Itza. You see the same file of chiefs, all bent forward and bearing lances and other insignia. Directly west of this building is a high mound, with a very much ruined flight of steps leading to the summit. This mound is surmounted by a modern building. Further south and in and near the village, often occupied as houses, are other ruins, in one of which I saw a long strip of painted cornice. The centre evidently represented a "calendario," but unfortunately it was broken in parts. The two groups I measured were accurately oriented to the magnetic points of the compass at the date of my visit. In speaking of the lintels, I find that I have omitted to state that they repose on very large blocks, which have in every case but two, circular holes made in them. (*Vide* Fig. 1.) They also project considerably thus, in cross-section. See also photograph of the Hall of Pillars. This concludes my notes on such buildings as I could accurately measure and study. The natives idols, etc., to buy. One word as to the probable age. The buildings are carefully looked after by the Government, and have an intelligent guardian in the person of Don Felix Quero, to whose hospitable courtesy and beautiful house I can heartily recommend all archaeologists who may visit Mitla. As he truly says, the big stones are too big, the small stones too small, to move with profit; hence they have suffered little ravage from men. An inhabitant of the village since 1849 assured me that the ruins are in exactly the condition they then were. But Burgoa in 1674 says: "This work being most ancient, beyond the memory of any one living, has yet lasted to our times. I saw them very leisurely over thirty years ago," and then goes on to describe them as they stand to-day. Therefore, in 1644, two hundred and thirty-eight years ago, they were practically as they are to-day. I can see no reason why they should not last for centuries still.

I beg that too severe criticism of my notes may not be exercised, as they were hastily thrown into shape, but every measurement may be relied on as correct. I have a large plan of the buildings measured by me, and tracings of some of Mühlenpfördt's plans. They are useful, but not absolutely correct. They are four in number. No. 1. Plan of Buildings remeasured by me. No. 2. Section through cruzero and subterranean passage. No. 3. Ground plan of cruzero and subterranean passage. No. 4. General plan of Mitla.

I found Mühlenpfördt's original plans in the library of the Institute at Oaxaca, but my short stay was shortened by violent attacks of fever, and I could only copy these. Mühlenpfördt seems to have understood the construction and size of the supposed passage. I also send three

Fig 7.



(Zapotecos) tell me that everywhere, but chiefly to the north and east, are large mounds, and during my stay I was continually pestered by women and children bringing me

photographs. No. 1. Hall of Pillars. No. 2. North Group, north building, from northwest. No. 3. North Group, north building, from northwest.

Hoping this humble contribution may be of some use to all American archaeologists, I lay down my pen with a feeling of regret akin to that I felt when I cast my last glance at the beautiful ruins I have so feebly described.

